# DEPARTMENT OF ECOLOGY State of Washington

#### **Annual Report – Recycling Facility**

#### Who should fill out the annual report form?

If you operate a permitted or exempt recycling facility (processor or intermediate/MRF), chapter 173-350 WAC requires you to complete an **Annual Report for Recycling Facilities**. If you didn't handle material intended for recycling or diversion from disposal during 2011, write a note on the annual report form saying that you didn't handle these materials and return it to us. If you have questions about whether this applies to your facility, please contact Dan Weston at (360) 407-6409 or daniel.weston@ecy.wa.gov.

#### Instructions for completing the forms

- 1) Fill in the **Facility Identification Information**.
- 2) Review the **Material Type Definitions (page 6)** for materials you will be reporting.
- 3) Use either the Materials Form (listing 34 material types) <u>OR</u> the County/City Form (listing all Washington counties and the City of Seattle). You don't need to use both the Materials Form and the County/City Form. Choose the form that best fits your information.
  - When using the Materials Form to report materials for more than one county, make copies
    of the form so you can list tonnage for different counties on separate sheets. For the
    Materials Form, list materials coming from the City of Seattle on a separate sheet.
  - When using the **County/City Form**, *make copies of the form* so you can report different materials. Include information for the City of Seattle separately.
- 4) Fill in all applicable sections for all materials collected for recycling <u>AND</u> the box at the bottom of the form for **Recycling Residuals Disposed** (this is required).
- 5) Complete the **Destination and Final Use of Materials Form**, listing what the material was used for and the name of the company that bought or received the materials collected during 2011.
- 6) Report all quantities in tons. General Measurement Standards and Reporting Guidelines (pages 7 and 8) can help you convert volume to weight.
- 7) Return the completed forms to Ecology by <u>April 2, 2012</u>. Call or e-mail Dan Weston at (360) 407-6409 daniel.weston@ecy.wa.gov if you need any help in filling out your annual report.
- 8) Mail separate copies of the forms to your local health department (addresses can be found at the Department of Health website at http://www.doh.wa.gov/LHJMap/LHJMap.htm) and Ecology:

Dan Weston
Department of Ecology
Waste 2 Resources Program
PO Box 47600
Olympia, WA 98504-7600

You may also fax the forms to Ecology at (360) 407-6102.

If you require this publication in an alternate format, please contact the Waste 2 Resources Program at360-407-6900. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech impairment can call 877-833-6341.

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# **Annual Report – Recycling Facility**

# **Facility Identification Information**

Company Name		Facility Name			Facility ID
Contact Person Title				Recycle ID	
Telephone	Fax			E-mail	
Mailing Address			Location Address		
City, State, Zip			City, State, Zip		
☐ <b>No</b> If no  When did you  Do you plan to	anned at your si	lowing questions of the for 20	□Yes  ment practices that i		
Prepared by:				Date:	



# Annual Report – Recycling Facility Materials Form

Material County of Origin (please fill in):			Reporting Year: 2011	Facility ID:
Photocopy this form for multiple countien next page.	Reporting Tear. 2011	T dolliky 15.		
Material (see definitions)	Material Description (if needed)	Tons or percent Commercial	Tons or percent Residential	Total Tons from County
1. Newspaper				
2. Cardboard				
3. High-Grade Paper				
4. Mixed Waste Paper				
5. Cartons				
6. Container Glass				
7. PET Plastics				
8. HDPE Plastics				
9. LDPE Plastics				
10. Other Recyclable Plastics				
11. Aluminum Cans				
12. Steel Cans				
13. Ferrous Metals (iron, steel)				
14. Nonferrous Metals				
(excluding aluminum cans)				
15. Appliances (white goods)				
<b>16. Electronics</b> (computers, CPUs, hard drives)				
17. Electronics (monitors, TVs)				
18. Electronics (other)				
19. Fluorescent Lights (specify)				
20. Antifreeze				
21. Used Oil				
22. Tires				
23. Vehicle Batteries				
24. Household Batteries				
25. Asphalt				
26. Concrete				
27. Construction/Demolition				
28. Wood Waste				
29. Landclearing Debris				
30. Yard Debris				
31. Food and/or Food Scraps				
32. Textiles (rags, clothing)				
33. Co-Mingled Recyclables				
(specify materials in mix)				
34. Other Recyclables (specify)				
Total Tons Collected/Recycled	2).			
(not including recycling residuals	S).			

Tons Recycling Residuals Disposed (not included in above total):	

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### Annual Report – Recycling Facility County/City Form

Material Collected (please fill in):  Photocopy this form for each different material type OR use the Materials		Reporting Year: 2011	Facility ID:	
Form on the previous p	Material Description (if needed)	Tons or Percent Commercial	Tons or Percent Residential	Total Tons or Percent from County
Adams	(II fleeded)	Commercial	Residential	moin county
Asotin				
Benton				
Chelan				
Clallam				
Clark				
Columbia				
Cowlitz				
Douglas				
Ferry				
Franklin				
Garfield				
Grant				
Grays Harbor				
Island				
Jefferson				
King				
Kitsap				
Kittitas				
Klickitat				
Lewis				
Lincoln				
Mason				
Okanogan				
Pacific				
Pend Oreille				
Pierce				
San Juan				
Skagit				
Skamania				
Snohomish				
Spokane				
Stevens				
Thurston				
Wahkiakum				
Walla Walla				
Whatcom				
Whitman				
Yakima				
Out of State				
Total Tons Collecte				
(not including recy	cling residuals):			

Takiiia					
Out of State					
Total Tons Collecte					
(not including recy	cling residuals):				
Tons Recycling Re	siduals Disposed (not	included in abo	ve total):		
City Section (Please c	omplete for materials coll	lected in Seattle.	Include Seattle to	nnage in King Coul	nty above.)
Seattle					
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00 (./.=/					



# Annual Report – Recycling Facility Destination and Final Use of Materials Form

For multiple destinations of same material, use blank lines at the end of the form. Facility ID: Final Use \*\*\* **Destination Location** Material **Outgoing Tons** To Which Company (City, State) (See below) 1. Newspaper 2. Cardboard 3. High-Grade Paper 4. Mixed Waste Paper 5. Cartons 6. Container Glass 7. PET Plastics 8. HDPE Plastics 9. LDPE Plastics 10. Other Recyclable Plastics 11. Aluminum Cans 12. Steel Cans 13. Ferrous Metals (iron, steel) 14. Nonferrous Metals (excluding aluminum cans) 15. Appliances (white goods) 16. Electronics (computers, CPUs, hard drives) 17. Electronics (monitors, TVs) 18. Electronics (other) 19. Fluorescent Lights (specify) 20. Antifreeze 21. Used Oil 22. Tires 23. Vehicle Batteries 24. Household Batteries 25. Asphalt 26. Concrete 27. Construction/Demolition 28. Wood Waste 29. Landclearing Debris 30. Yard Debris 31. Food and/or Food Scraps 32. Textiles (rags, clothing) 33. Co-Mingled Recyclables (specify materials in mix) 34. Other Recyclables (specify)

\*\*\*Please specify final use of material. Possible final uses include: recycling, composting, reuse, burning for energy, retreading (tires), stockpiling, or disposal.

**Total Outgoing Tons:** 

# **Material Type Definitions**

Please note some categories have two or more material definitions that apply.

1. Newspaper	Black and white newspaper, shredded newsprint, and including other paper normally
2. Cardboard	distributed inside a newspaper such as colored advertisements, comics, and flyers.  Brown uncoated paper with a wavy core and uncontaminated (no plastic lining or wax
2. Caluboalu	coating); and brown paper bags.
<ol><li>High Grade Paper</li></ol>	Computer paper, white bond, copy paper, notebook paper, and some colored paper.
4. Mixed Waste Paper	All other potentially recyclable paper, such as envelopes, telephone books, paperback
	books, cereal boxes, laundry soap boxes, and magazines.
5. Cartons	Poly-coated beverage containers with plastic, foil, or wax lining, such as milk or juice cartons. This doesn't include individual foil packets such as Capri Sun containers.
6. Container Glass	Glass containers for food, beverage, and other material. Excludes refillable bottles.
7. PET Plastics (#1)	Polyethylene terephthalate–clear and colored beverage containers made from PET; coded (#1).
8. HDPE Plastics (#2)	High-density polyethylene–clear and colored containers made from HDPE; coded (#2).
9. LDPE Plastics (#4)	Low-density polyethylene–includes mustard and some other squeezable containers; coded (#4). Includes plastic bags and plastic film.
10. Other Recyclable Plastics	All other plastics; recyclable plastics not included above.
11. Aluminum Cans	Aluminum beverage cans.
12. Steel Cans	Tin-plated steel cans, usually food containers.
13. Ferrous Metals	Magnetic metal items such as steel clothes hangers, sheet metal products, pipes, some
	automobile parts, auto bodies, and other miscellaneous, magnetic metal scraps.
14. Non-Ferrous Metals	Copper tubing, brass fixtures, insulated wire, small auto parts such as generators, water
	pumps. Aluminum other than beverage cans.
15. Appliances (white goods)	Appliances, water heaters, or microwave ovens.
16. Electronics (computer, CPUs, hard drives)	Hard drives from computer towers and laptops.
17. Electronics (monitors, TVs)	Display screens such as Monitors, CRTs, or TVs.
18. Electronics (other)	Please specify: cell or mobile phones, keyboards, mice, printers, etc.
19. Fluorescent Lights	Mercury lamp. Specify if compact fluorescent light bulb (CFL), 4-foot tube, 8-foot tube, etc.
20. Antifreeze	Also called coolant, from vehicle engines.
21. Used Oil	Automotive oil. Please indicate if oil is re-refined/recycled, or burned for energy recovery or heat.
22. Tires	Automobile, truck, and bicycle tires. Please specify if the tires are re-treaded, reused, recycled, or burned for energy.
23. Vehicle Batteries	Automobile, truck, boat, motorcycle batteries. Excludes industrial batteries.
24. Household Batteries	Includes: flashlight (Alkaline, Ni-Cad), and button batteries (lithium).
25. Asphalt	Asphalt paving material and similar wastes.
26. Concrete	Cement, concrete blocks, and concrete pieces.
27. Construction or	Mixed material generated as a result of a construction or demolition operation, including
Demolition Debris	toilets, sinks, rock, brick, insulation, roofing, and combination materials. Exclude the
	following materials if possible: asphalt, concrete, metals, wood, carpet, and gypsum.
28. Wood Waste	Pallets, scrap lumber, wood toys, fencing, and crates. Please specify if wood is recycled or burned for energy recovery.
29. Landclearing Debris	Stumps, brush, and limbs from non-residential locations. Please specify use of the material (chipped for mulch, burned for energy, etc.).
30. Yard Debris	Grass clippings, leaves, tree prunings, and weeds for composting.
31. Food and/or Food Scraps	Specify: food preparation wastes, food scraps, spoiled food, or donated edible food.
32. Textiles	Clothing and apparel, shop rags, and blankets.
33. Co-mingled Recyclables	Specify material types collected.
34. Other Recyclables:	Specify and describe material. Can include, but is not limited to: carpet and padding, gypsum drywall, mercury compounds, oil filters, rendering, other organics, photographic film, rubber materials, mattresses, and toner or ink cartridges.

#### General Measurement Standards and Reporting Guidelines<sup>1</sup>

#### **Volume and Count to Weight Conversion Factors for Recyclables**

<u>Material</u>	Volume/Count	Weight in Pounds	<u>Source</u>
Books	one cubic yard	500	EPA NRMRL <sup>2</sup>
Cardboard	one cubic yard	400	EPA NRMRL
Cardboard, baled	one cubic yard	1,000-1,200	NRC <sup>3</sup>
Magazines	one cubic yard	500	EPA NRMRL
Mixed Paper	one cubic yard	500	EPA NRMRL
Newsprint, loose	one cubic yard	500	EPA NRMRL
Newsprint, compacted	one cubic yard	720-1,000	NRC
Newsprint	12" stack	35	NRC
Office Paper	one cubic yard	500	EPA NRMRL
Phone Books	one cubic yard	500	EPA NRMRL
Aluminum cans, whole	one cubic yard	75	EPA NRMRL
Aluminum cans, flattened	one cubic yard	250	NRC
Aluminum cans	one full grocery bag	1.5	NRC
Catalytic converter	one	14	NRC
Ferrous cans, whole	one cubic yard	150	NRC
Ferrous cans, flattened	one cubic yard	850	NRC
Refillable beer bottles	case	11.4	NRC
Glass, whole bottles	one cubic yard	600-1,000	NRC
Glass, semi crushed	one cubic yard	1,000-1,800	NRC
Glass, crushed (mechanically)	one cubic yard	800-2,700	NRC
Glass, whole bottles	one full grocery bag	16	NRC
Glass, uncrushed to manually broken	55 gallon drum	125-500	NRC
PET, soda bottles, whole, loose	one cubic yard	40	EPA NRMRL
PET, soda bottles, whole, loose	gaylord <sup>4</sup>	40-53	NRC
PET, soda bottles, baled	30" x 62"	500	NRC
PET, soda bottles, granulated	gaylord	700-750	NRC
PET, soda bottles, granulated	semi-load	30,000	NRC
Film, baled	30" x 42" x 48"	1,100	NRC
Film, baled	semi-load	44,000	NRC
HDPE (dairy only), whole, loose	one cubic yard	24	NRC
HDPE (dairy only), baled	32" X 60"	400-500	NRC
HDPE (mixed), baled	32" x 60"	900	NRC
HDPE (mixed), granulated	gaylord	800-1,000	NRC

Disclaimer: This table is for general guidance only. Not for contract payment.
 Environmental Protection Agency National Risk Management Research Laboratory (EPA NRMRL).

National Recycling Coalition (NRC).
 Gaylord size most commonly used, 40" X 48" X 36."

Material HDPE (mixed), granulated Mixed Plastic Mixed PET & dairy, whole, loose Mixed PET, dairy & other rigid, whole,	Volume/Count semi-load one cubic foot one cubic yard one cubic yard	Weight in Pounds 42,000 50 average 32 average 38	Source NRC EPA NRMRL NRC NRC
loose Mixed rigid plastic, no film or dairy, whole, loose	one cubic yard	average 49	NRC
Mixed rigid plastic, no film, granulated Mixed rigid plastic & film, densified by mixed plastic mold technology	gaylord one cubic foot	500-1,000 average 60	NRC NRC
Food waste Food waste, solid and liquid fats Yard trimmings, branches Yard trimmings, grass Yard trimmings, leaves Wood chips Sawdust Stumps & Logs Grass clippings Manure Pallets	one cubic yard 55 gallon drum one cubic yard one cubic yard	800 412 350 350 350 500 375 1080 400-1,500 1628 185	EPA NRMRL NRC EPA NRMRL EPA NRMRL EPA NRMRL NRC Tellus Institute CCG <sup>5</sup> NRC FEECO <sup>6</sup> EPA NRMRL
Concrete Asphalt Composition Shingles Gypsum (dry)	one cubic yard one cubic yard one cubic yard one cubic yard	2850 2850 419 500-670	Ecology <sup>7</sup> Ecology CIWMB <sup>8</sup> NRC
Battery (auto) Tire – passenger car Tire - truck, light Tire – semi Used motor oil Oil filter drum Antifreeze	one one one one gallon one gallon	35.9 20 35 105 7.4 450 8.42	NRC NRC NRC NRC NRC Ecology
Computer (CPU) Computer (15" monitor) Computer (17" monitor) Computer (21" monitor) White goods/appliances	one one one one	30 30 45 60 150	Ecology Ecology Ecology Ecology

<sup>&</sup>lt;sup>5</sup> Developed by Cascadia Consulting Group (CCG) for a waste composition study in San Diego, California in 2000.

<sup>6</sup> "FEECO International Complete Systems and Equipment Handbook," 9<sup>th</sup> printing.

<sup>7</sup> Washington Department of Ecology (Ecology), industry surveys.

<sup>8</sup> "Conducting a Diversion Study – A Guide for California Jurisdictions," March 2001, California Integrated Solid Waste Management Board.